Reading

3 Read the texts again. These lines have been removed from them. Which text does each line come from?

a Some 10 million occupy every square centimetre of our flesh.
b They note that they often focus on our everyday anxieties.
c As a result, they see things in slow motion compared to us.
d So they began to loop the 'd' around the 'a',
e They're on the wrong side!

4 Answer the questions.

1 Why can a fly escape a fly swatter easily?
2 What gives you the best chance of hitting the fly with your swatter?
3 Why did men carry swords on the left side?
4 Why did buttons become cheaper in the 19th century?
5 What would only be the size of a pea?
6 Is the follicle mite harmful? What does it do?
7 What's the main difference between the different theories of why we dream?
8 Why don't we act out dreams physically?
9 Why did medieval monks get tired hands?
10 What might have happened to the @ symbol if Ray Tomlin hadn't used it? Why?

Vocabulary

5 Find the highlighted words in the texts. Work with a partner and try to work out the meaning from the context.

What do you think?

- Which language has the best word for the @ sign? What is it called in your language?
- Which theory of dreams makes most sense to you? Why? Give examples of your own dreams.
- Small children often ask a lot of 'Why' questions about the world.
  Think of some examples and ask and answer them with a partner, as if one of you was a child.

Why doesn't our cat talk to me? **Because cats can't talk.**

Why can't cats talk? **Because ...**

- Think of some more *'Have you ever wondered why ... ?'* questions. Choose some to research and report back on.

Have you ever

1 Why is it so difficult to swat a fly?

That buzzing fly is really getting on your nerves. So, you get your fly swatter and watch silently until the fly is resting. You get as close as you can, tense your muscles, and then ... thwack! But the fly is happily buzzing around on the other side of the room. And yet you moved so fast – how could it have got away?

The fly's ability to escape has nothing to do with sensitivity to wind or noise; it's all to do with its eyesight and the speed of its brain signals. Flies have around 6,000 tiny lenses in each eye, and their brains and nervous systems can receive and process information seven times faster than humans. [1]_____ High-speed digital cameras show that from the fly's viewpoint, your hand is moving towards it very slowly. Within *30 thousandths* of a second of seeing the swatter, the fly has worked out where it's coming from and how to jump away from it. Your hand takes about *two hundredths of a second* to reach it, 150 times longer, so unless the fly is feeling very groggy, you stand no chance. If you still want to try, the best strategy is to aim your swatter towards where you think the fly is *going* to jump, rather than where it is now.

2 Why are buttons on different sides on men's and women's clothing?

Have you ever borrowed a boyfriend's or girlfriend's coat and found that doing up the buttons feels weird? [2]_____

The reasons for this strange inconsistency lie in the distant past. When men carried swords, they were worn on the left, so they could draw them using the usually dominant right hand. If their jackets had had buttons on the left, the handle of the sword could have easily got caught in their clothing as they pulled it across their body. It was also easier to slip the hand inside to pull out a hidden weapon if clothing was buttoned this way.

So how come women's buttons are different? Well, in the 17th and 18th centuries all buttons were made by hand, and because they were expensive, they were only used on the clothes of the wealthy. It wasn't considered proper for wealthy women to dress themselves, they had servants do it for them, and the servants found it easier to do up the buttons on someone facing them if they were on the left. In the late 19th century, when buttons became cheaper with mass-production, all women wanted to copy the style of the wealthy, and the tradition has remained to this day.

wondered . . . ?

Answers to some of the puzzling questions in life

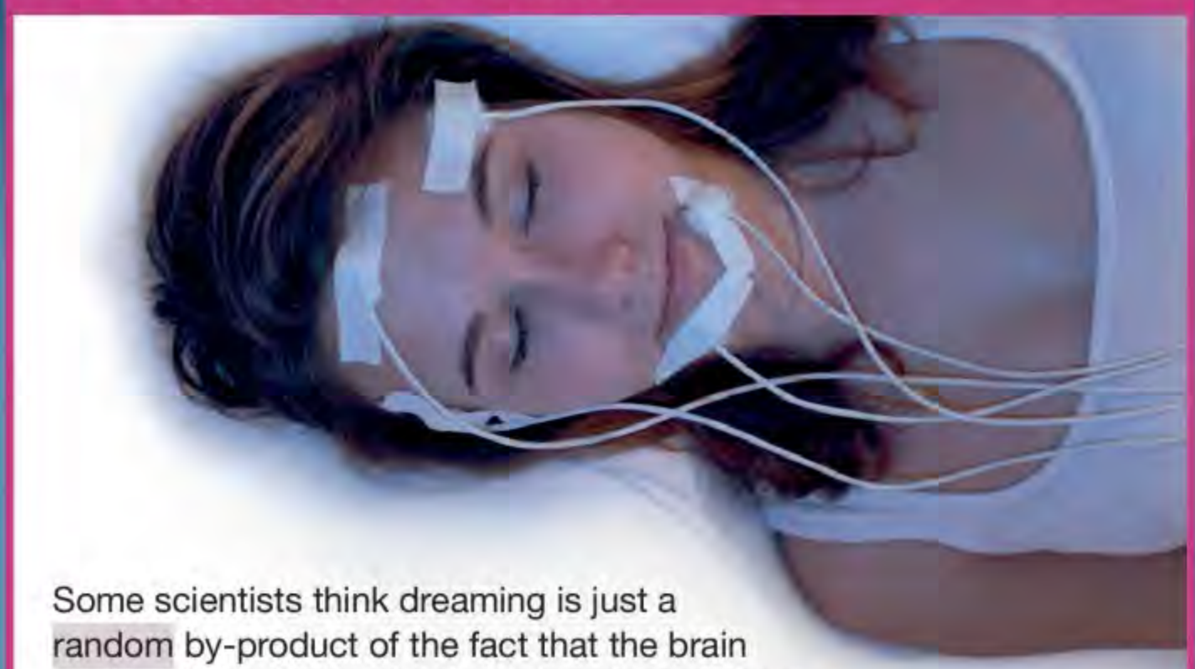
3 How many species live in or on the human body?

There are about 200 species, including 80 in the mouth alone, which inhabit the human body. However, alongside these, our bodies are also host to a mindboggling number of bacteria. The total excreted by the body every day ranges from 100 billion to 100 trillion. [3]_____. The most densely populated areas of the human body are the teeth, throat, and digestive tract, which overflows with 'friendly' bacteria that are essential to our health. Their numbers may be vast, but their scale is microscopic. If you put the billions of bacteria on your skin together, it would only be the size of a pea.

Another life form that keeps us company is the common parasite, for example, the follicle mite. It's found on every individual in huge numbers, and it's a good thing, too, as they spend their days harmlessly munching dead skin cells, acting as invisible refuse recyclers. A less welcome guest is the human itch mite, which lays its eggs on or under our skin, causing the intensely itchy condition known as scabies.

eyelash mites

4 Why do we dream?



Some scientists think dreaming is just a random by-product of the fact that the brain can't switch off completely during sleep. Others think it may be the brain tidying up its filing system during the night, processing memories and their associations.

Psychologists see more meaning in our dreams. [4]_____, and think we are practising facing them again, in different situations. A need to rehearse the most extreme worst-case scenarios would explain recurring nightmares – suppose you really did absolutely no revision for that exam? What if you got to work or college and had forgotten to put your trousers on? But our dreams can also show us important truths, and they sometimes seem to decide it's time we practised having the experiences we wish for – so you can even fly!

But is there any danger we'll get out of bed and jump out of the window? Well in 1951, physiologist Eugene Aserinsky connected his 8-year-old son to an early brainwave machine, and watched the results through the night. They showed that every 90 minutes we enter a different state in order to dream, called REM (because we display **R**apid **E**ye **M**ovement). However, most of our muscles switch off during this period, meaning that the flying and running away from monsters only happens in our heads.

5 What is the origin of the @ symbol?

History suggests that the @ in email addresses, commonly referred to as the 'at sign', stemmed from the tired hands of medieval monks. During the Middle Ages, before the invention of the printing press, every letter of a word had to be painstakingly transcribed by hand for each copy of a book. The monks who performed these tedious copying duties, usually in Latin, looked for ways to reduce the number of individual strokes for common words. Although the word for 'at' in Latin, 'ad', is also short, it was so common that the monks wished it were even shorter. [5]_____ making it much quicker to write.

The @ symbol, would have been largely forgotten in modern times if it hadn't been for a computer scientist called Ray Tomlinson. In 1971, he wanted a symbol to separate a person's name from that of their computer, and now all email addresses follow the format *joe@myserveraddress.com*.

The symbol has different and often charming names in different languages, many of which see the shape as a kind of animal. These include:

Klammeraffe is **German** for 'hanging monkey'

apenstaartje is **Dutch** for 'monkey's tail'

kissanhäntä is **Finnish** for 'cat's tail'

dalphaengi is **Korean** for 'snail'

papaki is **Greek** for 'little duck'

kukac is **Hungarian** for 'worm'

grisehal is **Norwegian** for 'pig's tail'

snabel is **Danish** for 'elephant's trunk'

sobachka is **Russian** for 'little dog'